



<b>Algemene gegevens</b>	
TKI-Nummer	AF-EU-17038
Titel	Program for Innovative Global prevention of <i>Streptococcus suis</i>
Topsector (A&F of T&U)	A&F
Projectleider (onderzoek)	Jesús Arenas
Werkelijke startdatum	31/08/2017
Werkelijke einddatum	30/03/2021
Korte omschrijving inhoud	PIGSs is a Horizon2020 European project. The problems addressed by this project are the major economic losses to the pig production industry worldwide and the animal health burden caused by infections with <i>Streptococcus suis</i> .

<b>uitvoerende partijen</b>	
betrokken kennisinstellingen	Wageningen University (NL), The Chancellor, Masters and Scholars of the University of Cambridge (UK), WBVR (NL), Ceva Sante Animal (FR), Institut de Recerca i tecnologia agroalimentaries (IRTA), Academic Medisch Centrum bij de Universiteit van Amsterdam (NL), Danmarks Tekniske Universitet (DK), Stiftung Tierzaerztliche Hochschule Hannover (DE),
overige partijen	Hansen A/s (DK)

<b>Planning en voortgang</b>	
Loopt het project volgens planning? Indien er wijzigingen zijn t.o.v. de plannen, geef hierop een toelichting. Indien er knelpunten zijn, geef hiervan een korte beschrijving	In collaboration with several groups from Europe, WBVR aims in PIGSs i) the discovery of novel virulence factors that could be potential candidates for new vaccines (workpackage 2, WP2), ii) the study of co-infections of <i>S. suis</i> with virus agents such as Porcine Reproductive and Respiratory Syncytial Virus (PRRSV) and Swine Influenza Virus (SIV) that are often observed in the farms (workpackage 4, WP4), and iii) an epidemiological study for (1) the quantification of the disease burden caused by <i>S. suis</i> and (2) the identification of the main risk factors that lead to clinical cases of <i>S. suis</i> in The Netherlands (Workpackage 5, WP5). Our Tasks regarding WP2 and WP4 started and they are in line with planning. The tasks regarding WP5 depends on other collaborators and they are planning to start in 2018. WBVR has collaborated and attended to all consortium meetings, conferences, and meetings within WPs till date. In addition, WBVR have organized one teleconference within WP.

<b>Highlights</b>	
WP2.	WBVR aims in this project the discovery of novel virulence factors. These factors could be potential candidates for new vaccines. During 2017, we succeed to identify many potential virulent factors using genome wide techniques like Tnsequ. Among them, we selected those with a potential application in vaccinology. We generated mutants and in 2018 we will further investigate their virulence mechanisms using a diversity of in vitro techniques with particular focus on host-pathogen interactions and bacterial resistance. So far, we optimized techniques to test interbacterial interactions, which will be used in new projects.
WP4.	WBVR is leading an investigation about the role of viral and bacterial coinfections. PRRSV and SIV infect the upper and lower airways of pigs. SIV and PRRSV interacts with epithelial cells

and innate immune system of the host, respectively. In 2017, we initiated a characterization of the interaction of PRRSV / *S. suis* with cells of the immune system using in vitro models. These initial assays are the basis to study in 2018 the diversity of in vitro models to gain more insights in the phenotypes already observed. We will take advantage of novel techniques developed by our collaborators to further study coinfection.

**Aantal opgeleverde producten**

Wetenschappelijke artikelen	Rapporten	Artikelen in vakbladen	Inleidingen/ workshops/ invited lectures	Aangevraagde octrooien /first filings	Spin-offs

Verwacht u het komende jaar een octrooiaanvraag?	No
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**Bijlage: Titels van de producten of een link naar de producten op een openbare website**

Link naar samenvatting Kennis Online:

*Omdat het vanwege inzet van vrij vallend budget vanwege klasritmewijzing bij andere PPS-en slechts om de financiering van 1 jaar gaat is er geen info op KennisOnline geplaatst.*